

REMARKS

Claim 1 has been amended to recite that (1) the difference between the apparent density of the rigid layer and the apparent density of the bulky layer is 0.14 g/cm^3 or less and (2) the entanglement-based nonwoven fabric comprises a merely-entangled nonwoven fabric fused with thermally fusible fibers and/or adhered with a binder". Support for these limitations can be found, for example, in the claims as originally filed, and page 3, lines 27-31; page 4, lines 4-5; and page 13, lines 6-8 of the application. Claim 1 has also been amended to remove the limitation that the thickness of the rigid layer is 0.6 to 2 mm. Claims 4 and 13 have been canceled without prejudice or disclaimer. Claims 28-31 have been added. Support for claims 28 and 29 can be found, for example, on page 12, lines 7-10, and Examples 1-3 (pages 23-26) of the application. Support for claim 30 can be found, for example, on page 3, line 33 to page 4, line 2; page 4, lines 32-33; page 12, lines 3-6 and 11; and Examples 1-3 of the application. Support for claim 31 can be found, for example, on page 5, lines 31-35 of the application. Claims 1-3, 6-12, and 15-31 are pending and at issue.

Claims 1-4, 6-13, and 15-27 stand rejected as obvious over Nemoto (U.S. Patent No. 6,102,465) in view of Nagata (U.S. Patent No. 6,312,542).

Claim 1 has been amended to recite that the difference in the apparent densities of the rigid layer and the bulky layer is 0.14 g/cm^3 or less. This small difference in apparent density results in a reduced difference in shrinkage between the two layers. Shrinkage can occur when the laminate is introduced to high temperatures, e.g., during the summer or upon fusing the thermally-fusible fibers. Accordingly, the laminate of the present invention is not prone to peeling or buckling. This effect is shown in the examples, particularly at page 30, lines 5-24.

In Samples 2-4 the differences in the apparent densities were 0.165 g/cm^3 , 0.255 g/cm^3 , and 0.255 g/cm^3 respectively. Buckling was observed between the rigid and bulky layers in these three examples after being heated at 240°C for 3 minutes and adjusted to a thickness of 15 mm

using a cold press molding machine. In contrast, Sample 1, which had a difference in the apparent densities of only 0.095 g/cm^3 , exhibited no buckling between the rigid and bulky layer.

Neither Nemoto nor Nagata disclose or suggest that a difference in apparent densities between the rigid and bulky layers of less than 0.14 g/cm^2 is critical for obtaining a laminate which does not peel or buckle upon exposure to the heat. Nemoto and Nagata also fail to disclose or suggest the positive effects, e.g., the excellent formability, obtained from minimizing the difference in apparent densities.

Claim 1 also recites that the average of the longitudinal tensile strength and the transverse tensile strength (average tensile strength) of the merely-entangled nonwoven fabric is not less than 150 N/50 mm width. Neither Nemoto nor Nagata teach or suggest a merely-entangled nonwoven fabric having an average tensile strength of not less than 150N/50 mm. Conversely, the cited references relate to sound absorption, and Nemoto teaches that sound absorption is *decreased* when the degree of entanglement is high, which correlates to a high average tensile strength. Therefore, the cited references teach away from the present invention. Furthermore, because of the high average tensile strength of the rigid layer of the present invention, the nonwoven fabric-laminate exhibits excellent form stability (see page 4, lines 17-20 of the present application).

In conclusion, claim 1 as amended recites two properties of a nonwoven fabric-laminate which results in excellent formability, resistance to external factors, and form stability -- 1.) having a difference between the apparent densities of the rigid layer and bulky layer of 0.14 g/cm^3 or less, and 2) having a merely-entangled nonwoven fabric that has an average tensile strength of less than 150 N/50 mm width. These aspects are not taught or suggested in Nemoto or Nagata. Accordingly, Nemoto and Nagata alone or in combination fail to render obvious the presently claimed invention, and applicants respectfully request withdrawal of this rejection.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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